## ALASKA'S 2003 CROP AND WEATHER REVIEW

#### **JANUARY & FEBRUARY**

Above normal temperatures continued into the new year across most of Alaska. Precipitation levels were generally 50% below normal in January, but by February were recorded as 25% above normal in Southcentral and 2 1/2 times above normal in Fairbanks. Much of the precipitation in February fell as rain, causing the restart of the Iditarod to move north to Fairbanks.

#### MARCH & APRIL

Temperatures were generally below normal in March but were above normal in April in most locations. Precipitation was well below normal both months with the Fairbanks area receiving only 7% of normal precipitation in March and 24% of normal in April. Southcentral had 50% and 33% of normal precipitation, respectively.

#### **MAY**

Temperatures were very close to normal during most of May, while precipitation was generally below normal. Field work was underway by the first week of May in the Mat-Su Valley and barley planting was underway in Delta Junction by the second week. By month's end 95% of the barley crop and 85% of the oat and potato crops were planted. Barley and oats were both reported as 5% emerged. Potatoes were 55% planted, while vegetables were being transplanted across the state.

#### JUNE

Temperatures remained near normal for the month. Precipitation was well below normal in the Tanana Valley, and 10% below normal in Southcentral Alaska. Barley was 50% in boot, while the oat crop was 40% in boot as the month ended. Potatoes were 75% emerged and hay harvest was a quarter complete. Harvest of vegetables continued.

#### JULY

Temperatures varied across the state with Southcentral being above normal for the month and the Tanana Valley being below normal. Precipitation

continued to be below normal in Southcentral but the Fairbanks area set a new record for rainfall for the month, as rain fell across the Tanana Valley. Rains hampered the hay harvest near Delta mid-month. Statewide the first cutting of hay was 95% complete by month's end. Ten percent of the barley was turning color, while the oat crop was 30% in dough. Both crops were rated as 90% fair to good. Potatoes were 40% in bloom.

#### **AUGUST**

Conditions varied across the state with the Tanana Valley having normal temperatures with just above normal precipitation. Southcentral saw above normal temperatures with below normal rains. Potatoes, barley, oats, and vegetables were all being harvested by the end of the month. Harvest of a second cutting of hay continued.

### **SEPTEMBER**

Mid-month several hard frosts were reported in the Delta Junction area that severely damaged the potato crop. Less severe damage was also reported around Palmer. Overall, temperatures were slightly cooler than normal, while precipitation was above normal in the Tanana Valley and below normal in Mat-Su. Our last report in September had both the barley and oat harvests 90% complete, and the potato harvest at 70% complete. State hay supplies were reported as 20% short and 80% adequate.

#### **OCTOBER - DECEMBER**

Temperatures were well above normal in October. November saw continued warmer than normal temperatures in the Tanana Valley, with cooler than normal temperatures in Mat-Su. December saw cooler than normal temperatures in most locations. Precipitation was below normal in the Tanana Valley for the three month period, while the Mat-Su Valley was significantly above normal. The end of the year saw a good snow cover on the ground in many areas. This was said to be the first "normal" winter in several years.

#### **ALASKA PRECIPITATION DATA (Inches)** 2003 Precipitation Average Precipitation 1/ 2003 Station Sep May Jul Year Apr Mav Jun Jul Sep Year Apr Aug Aug Jun Snow TANANA VALLEY Fairbanks Ap. 0.05 0.27 0.61 5.96 1.89 1.27 13.85 0.27 0.58 1.32 1.89 1.88 1.05 10.57 55 University Exp. Sta. 0.25 0.67 1.57 2.11 2.34 1.26 12.24 na na na 59 na na na na Eielson Field 0.07 0.17 1.64 5.30 2.74 13.19 0.34 0.75 1.72 2.51 2.35 1.38 13.02 1.77 36 0.03 0.32 0.31 7.87 0.25 0.86 2.27 2.01 Big Delta Ap. 3.63 1.73 1.29 2.66 1.09 11.47 na MATANUSKA VALLEY 0.17 0.67 1.23 2.34 16.68 0.54 0.67 1.01 1.90 2.67 2.60 15.70 Anchorage Ap. 0.95 1.96 78 Lazy Mountain 1.24 0.71 2.39 3.16 17.15 0.42 1.00 1.33 3.09 2.90 19.02 0.35 1.37 72 2.08 0.89 0.82 Matanuska Exp. Sta. 0.15 2.19 1.99 1.24 12.55 0.45 0.73 1.38 2.21 2.57 2.44 15.36 43 Sutton 2 E 0.31 0.99 0.83 3.74 2.84 1.26 21.39 78 0.48 0.91 1.40 2.46 2.77 2.94 17.55 KENAI PENINSULA Homer Ap. 0.97 0.80 0.68 20.62 1.20 1.02 25.08 1.45 3.46 1.05 0.97 1.58 2.53 3.00 na 0.31 0.98 1.86 1.37 3.19 19.75 0.74 0.93 1.94 2.68 3.26 Kenai Ap. 1.33 1.19 19.39 na OTHER AREAS Kodiak Ap. 7.82 4.54 7.78 77.24 3.96 1.62 6.63 3.36 8.31 87.69 66 5 48 5 70 5.45 4.14 Nome Ap. 1.10 0.42 1.52 2.04 3.98 0.88 17.62 0.71 0.72 1.06 2.19 3.31 2.47 15.98 80 McGrath Ap. 0.36 1.37 2.21 4.74 2.27 1.43 22.28 0.70 0.93 1.53 2.30 2.95 2.28 17.36 76 Juneau Ap. 0.86 2.90 3.74 3.44 4.53 11.41 54.13 2.86 3.47 3.12 4.34 5.39 7.30 56.67 76 1.76 2.03 2.44 2.45 4.43 2.13 2.57 2.47 3.76 4.28 Cold Bay Ap. 3.62 39.87 61 2.46 38.55

Source: Climatological Data Annual Summary (Alaska) published by the National Oceanic and Atmospheric Administration (NOAA)

<sup>1/</sup> Averages based on Historical records from 50 or more years of data, if available.

## ALASKA TEMPERATURE DATA

Station		200	03 Avera	ges			Histor	ical Aver	Average No. of Freeze Free	Elevation in Feet			
	Year	Jan	Apr	Jul	Sep	Year	Jan	Apr	Jul	Sep	days 2/		
					Deg	rees					Days	Feet	
TANANA VALLEY													
Fairbanks Ap.	29	-3	33	61	42	27	-10	31	62	45	112	436	
University Exp. Sta.	28	1	33	61	41	28	-7	31	61	45	91	475	
Eielson Field	39	na	34	61	41	26	-10	31	61	45	108	547	
Big Delta Ap.	31	6	33	60	39	28	-3	31	60	44	105	1,268	
MATANUSKA VALLEY													
Anchorage Ap.	39	22	38	62	49	36	15	36	58	48	138	114	
Lazy Mountain	37	22	37	59	46	35	17	35	56	45	104	728	
Matanuska Exp. Sta.	39	20	39	61	48	36	13	37	58	48	110	150	
Sutton 2 E	38	22	39	60	47	36	16	37	57	46	77	550	
KENAI PENINSULA													
Homer Ap.	41	32	39	57	48	38	23	36	53	47	115	89	
Kenai Ap.	38	23	37	59	47	34	12	34	55	47	105	86	
OTHER AREAS													
Kodiak Ap.	42	36	41	56	49	41	31	38	55	50	140	111	
Nome Ap.	29	13	26	49	42	26	6	19	51	42	78	13	
McGrath Ap.	29	-5	32	60	42	26	-8	28	59	44	105	344	
Juneau Ap.	42	32	42	58	49	41	24	40	56	50	139	12	
Cold Bay Ap.	41	33	37	51	48	38	28	34	51	48	133	90	

<sup>1/</sup> Averages based on Historical records from 50 or more years of data, if available.

Source: Climatological Data Annual Summary (Alaska) published by the National Oceanic and Atmospheric Administration (NOAA)

<sup>2/</sup> Average based on historical records, number of years used varies by location from 18 to 85 years.

# WEEKLY PAN EVAPORATION AND PRECIPITATION, 2000 - 2003 GROWING SEASON

Month/Week

		200	00		2001					200	2		2003				
	Evap	Total	Precip	Total													
May-Week 1	1.19	1.19	0.01	0.01	0.04	0.04	0.35	0.35	0.60	0.60	0.06	0.06	1.21	1.21	0.00	0.00	
Week 2	1.01	2.20	0.05	0.06	0.56	0.60	0.36	0.71	0.09	0.69	0.33	0.39	0.16	1.37	0.35	0.35	
Week 3	0.22	2.42	0.71	0.77	0.75	1.35	0.12	0.83	0.97	1.66	0.15	0.54	0.22	1.59	0.52	0.87	
Week 4	0.76	3.18	0.22	0.99	0.61	1.96	0.15	0.98	1.30	2.96	0.00	0.54	0.75	2.34	0.02	0.89	
June-Week 1	1.15	4.33	0.02	1.01	1.17	3.13	0.03	1.01	0.70	3.66	0.30	0.84	1.10	3.44	0.00	0.89	
Week 2	1.04	5.37	0.04	1.05	0.39	3.52	0.34	1.35	0.54	4.20	0.26	1.10	1.31	4.75	0.01	0.90	
Week 3	0.70	6.07	0.20	1.25	0.43	3.95	0.48	1.83	1.00	5.20	0.01	1.11	0.41	5.16	0.00	0.90	
Week 4	1.15	7.22	0.05	1.30	1.30	5.25	0.00	1.83	0.74	5.94	0.17	1.28	0.62	5.78	0.10	1.00	
Week 5	-0.18	7.04	0.73	2.03	1.20	6.45	0.12	1.95	1.14	7.08	0.17	1.45	0.91	6.69	0.00	1.00	
July-Week 1	0.20	7.24	0.60	2.63	-1.36	5.09	1.85	3.80	0.54	7.62	0.18	1.63	1.09	7.78	1.09	2.09	
Week 2	0.41	7.65	0.26	2.89	-0.55	4.54	0.97	4.77	1.09	8.71	0.00	1.63	1.27	9.05	0.00	2.09	
Week 3	-0.08	7.57	0.79	3.68	0.35	4.89	0.26	5.03	1.20	9.91	0.38	2.01	1.22	10.27	0.00	2.09	
Week 4	0.33	7.90	0.35	4.03	0.01	4.90	0.52	5.55	-0.30	9.61	0.81	2.82	0.12	10.39	0.58	2.67	
August-Week 1	0.49	8.39	0.17	4.20	-0.04	4.86	0.55	6.10	1.25	10.86	0.00	2.82	0.56	10.95	0.44	3.11	
Week 2	0.63	9.02	0.14	4.34	0.84	5.70	0.00	6.10	-1.38	9.48	1.93	4.75	1.04	11.99	0.05	3.16	
Week 3	0.20	9.22	1.06	5.40	-0.05	5.65	0.59	6.69	0.03	9.51	1.04	5.79	-0.70	11.29	1.08	4.24	
Week 4	0.13	9.35	0.37	5.77	0.57	6.22	0.06	6.75	-1.26	8.25	1.45	7.24	0.16	11.45	0.58	4.82	
Sept-Week 1	-0.16	9.19	0.54	6.31	0.32	6.54	0.10	6.85	-0.10	8.15	1.06	8.30	0.17	11.62	0.28	5.10	
Week 2	0.26	9.45	0.16	6.47	0.81	7.35	1.73	8.58	-0.34	7.81	0.30	8.60	-0.30	11.32	0.01	5.11	
Week 3	0.21	9.66	0.22	6.69	0.53	7.88	0.00	8.58	0.07	7.88	0.18	8.78	0.02	11.34	0.61	5.72	
Week 4	-1.18	8.48	1.55	8.24	0.30	8.18	0.13	8.71	0.14	8.02	1.30	10.08	-0.60	10.74	0.02	5.74	
Week 5	0.27	8.75	0.84	9.08	0.26	8.44	0.00	8.71	-1.16	6.86	0.00	10.08	-0.50	10.24	0.41	6.15	
Seasonal Totals		8.75		9.08		8.44		8.71		6.86		10.08		10.24		6.15	

NOTE: Weekly evaporation and precipitation (in inches) data is collected and provided by UAF, Agricultural and Forestry Experiment Station, located on Trunk Road in Palmer, Alaska.